



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,711	08/02/2001	Chiaki Kasada	KASADA-4	6303

7590 05/26/2005

Browdy and Neimark  
624 Ninth Street NW  
Washington, DC 20001-5303

EXAMINER
----------

ANGEBRANDT, MARTIN J

ART UNIT	PAPER NUMBER
----------	--------------

1756

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/890,711

Applicant(s)

KASADA ET AL.

Examiner

Martin J. Angebranndt

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 6-8, 10-12, 15 and 18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-8, 10-12, 15 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 1756

1. The response of the applicant has been received and made of record. Responses to the arguments of the applicant are presented after the first rejection to which they are directed.

Claims 6-8,10-12,15 and 18 are active. Rejection of the previous office action not repeated below are withdrawn based upon the amendments to the claims and corresponding arguments.

2. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-5, drawn to styryl dyes.

Group II, claim(s) 6-13 and 15-20, drawn to light absorbing compositions and optical recording media using styryl dyes.

Group III, claim(s) 14, drawn to methods of making styryl dyes.

3. The inventions listed as Groups III and III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The X references cited on the PCT SERACH REPORT evidence that any feature which unites the inventions fails to make a contribution over the prior art. See PCT rule 13.2

4. A telephone call was made to Anne M. Kornbau on June 9, 2004 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the

Art Unit: 1756

currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6. Applicant's election of group II in the reply filed on 07/09/2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The applicant submitted no arguments contesting the propriety of the restriction requirement. The examiner notes that a double patenting rejection could not be made between co-pending applications derived from this application, but the assertion of the applicant that references may applied to only one of the groupings is flawed and is not considered binding or legally sound.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 1756

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 6,9,10 and 13 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Kobayashi et al. '215.

See the benzothiazole styryl dyed gelatin films in table II (col 33). See the gelatin dyed films dyed with the thiazole styryl dye in table 1 (col. 29-30). See the gelatin dyed films dyed with the oxazole styryl dye in table IV (col. 37-38). See the gelatin dyed films dyed with the benzooxazole styryl dye in table V (col. 37-40). See the gelatin dyed films dyed with the benzoindole styryl dye in table VII (col. 45-48). See the gelatin dyed films dyed with the pyridyl styryl dye in table X (col. 53-54). See the gelatin dyed films dyed with the benzopyridyl styryl dye in table XI (col. 55-56) and table XII (col. 57-60). See the benzodiazole styryl dye in example 22, which is disclosed in a methanol solution. Useful groups for the heterocyclic moieties are shown in columns 21-28.

The dyes gelatin films having a yellow color such as I-8 (table II), I-19, and I-20 (table IV) and I-30 (table V), dyes I-64 to I-66 (table X), dye I-69 and I-72 (table XI), Dyes I-75 and I-78 (table XIII), dyes I-82 and I-84 (table XIV) will absorb in the blue with absorption maxima at about 400 nm. The absorption properties are dominated by the chain length. The rejection stands.

10. Claims 6,9,10 and 13 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Dalzell et al. '182.

See compositions in the table using dye 5, which has a yellow color (col 10) and will absorb in the blue with absorption maxima at about 400 nm.

The absorption properties are dominated by the chain length. The rejection stands.

Art Unit: 1756

11. Claims 6-13 and 15-20 are rejected under 35 U.S.C. 102(b) as being fully anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kanno et al. GB 2329751.

See example 1, which uses a benzoindole styryl dye mixed with both a bisdithiolate quencher and a nitroso-(dimethylamino)diphenylamine quencher to form a recording layer, which is applied to a substrate, overcoated with an AlTi reflective layer and a UV curing epoxide protective layer. Example 5 uses plural styryl dyes. Example 6 uses plural quenchers and styryl dyes. The examiner holds that both of the quenchers compounds absorb light in the visible and/or that these or any additional styryl dye in the composition meets the “one or other organic dye compounds sensitive to the visible” limitation. The use of plural styryl dyes is disclosed (27/1-10). The use of quenchers is disclosed. (27/11-29/3) Dye I-7 and I-20 are similar to the dye of chemical formula 21 in the instant specification. In formula I,  $Y^2$  may be electron donative groups and  $Y^{1a}$  and  $Y^{1b}$  may be electron attracting groups

It is not clear what the absorption properties of the dyes used in the examples is. It may be that the use of electron attracting substituents on the terminal moiety ( $\phi_2$ ) shifts the absorption of the dye to just below 400 nm. The examiner notes that the language “electron attracting” is not supported by the specification. Specific moieties appear on page 9 of the specification. Examples using dyes I-1, I-2, I-10 meets the claims based upon the electron withdrawing moieties on the heterocyclic moieties, or alternatively, it would have been obvious to one skilled in the art to modify the examples by using exemplified dyes I-7 or I-20 in place of those specifically used in the examples, noting that the number of exemplified dyes is much more selective than the broader genus of formula I.

Art Unit: 1756

12. Claims 6,9,10 and 13 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Miyamoto et al. JP 11-034489. (machine translation attached)

See the benzoindole styryl containing optical recording medium is example 15 [0041]. Useful groups for the heterocyclic moieties are shown at [0047]. The addition of quenchers is disclosed [0021].

Due to the use of the electron withdrawing groups, the examiner holds that the dyes used in the examples inherently meet the claim limitations.

13. Claims 6-8,10-12 and 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyamoto et al. JP 11-034489.

It would have been obvious to add quenchers, which also acts as absorbers to the cited examples based upon the direction to do so within the reference.

Due to the use of the electron withdrawing groups, the examiner holds that the dyes used in the examples inherently meet the claim limitations.

14. Claims 6,7,10,11,13,15,16 and 19 are rejected under 35 U.S.C. 102(b) as being fully anticipated by JP 11-138992. (machine translation attached)

See the benzoindole styryl containing optical recording medium is example 1 [0056-0069] which also includes a phthalocyanine recording layer disposed atop this. Useful groups for the heterocyclic moieties are shown at [0020]. The addition of quenchers is disclosed [0046, 0042]. In this case, the light absorbent is considered to be the laminated films.

Due to the use of the electron withdrawing groups, the examiner holds that the dyes used in the examples inherently meet the claim limitations.

Art Unit: 1756

15. Claims 6-8,10-12,15 and 18 are rejected under 35 U.S.C. 102(b) as being fully anticipated by JP 11-144313.

See the benzothiazole styryl (1c) containing optical recording medium is example 2 with a stabilizing agent [0049]. Useful groups for the heterocyclic moieties are shown at [0008,0047]. The addition of quenchers is disclosed [0040-0041].

The compound 1c is similar to dye of chemical formula 2 on page 11 of the specification.

16. Claims 6,7,10 and 11 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Miura et al. JP 63-256945.

See examples in table 1, which use dye B which is disclosed as having an absorption maxima of 387 nm together with another dye. Benzothiazole, indole and benzopyridyl are phi 1 moieties.

17. Claims 6,8,10 and 12 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Ichimura et al. EP 0246885.

Ichimura et al. EP 246885 describes in example the dyes II-10 (page 6), which has an absorption maxima of 373 nm (page 13) mixed with PVA and coated onto a glass substrate. See also examples 5 and 6.

18. Claims 6 and 10 are rejected under 35 U.S.C. 102(b) as being fully anticipated by JP 01-018441.

See figure 3, which describes the two different forms (open/closed)(page5 upper left to page 5/upper right) and example 2.

19. Claims 6 and 10 are rejected under 35 U.S.C. 102(b) as being fully anticipated by JP 63-054377.



Art Unit: 1756

See figure 1, which describes the two different forms (open/closed)(page 3 lower right hand column, example 1.)

20. Claims 6,8,10 and 12 are rejected under 35 U.S.C. 102(b) as being fully anticipated by JP 62-164591.

See figure 2, which describes the two different forms (open/closed)(page 4 upper right to page 5/lower right, example 1.)

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

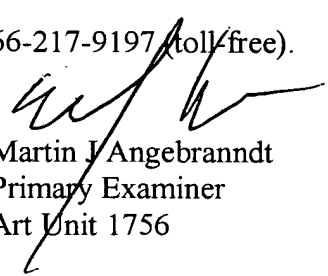
JP 10-182997 and JP 63-288785 (note metal complexes) are cumulative.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin J Angebrannt whose telephone number is 571-272-1378. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

Art Unit: 1756

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Martin J. Angebrannndt  
Primary Examiner  
Art Unit 1756

05/17/2005